

**IN THE COURT OF APPEALS OF THE STATE OF WASHINGTON**

PACIFIC TOPSOILS, INC., owner of	)	NO. 63526-3-I
Maltby Composting Operation,	)	
	)	
Respondent,	)	DIVISION ONE
	)	
v.	)	
	)	
SNOHOMISH HEALTH DISTRICT, a	)	UNPUBLISHED OPINION
Washington Municipal Corporation,	)	
	)	FILED: April 12, 2010
Appellant.	)	
	)	

Lau, J. — Pacific Topsoils, Inc., challenges a condition in its operating permit stating that the composting process it uses does not comply with regulatory requirements and giving it three years to come into compliance. The dispute centers on whether Pacific’s large static pile compost technique is designed to control the composting process in a way that “promotes” aerobic composting. Because Pacific’s process is designed to control the parameters specified in the regulation in a way that encourages aerobic decomposition, it complies with the regulation. Accordingly, we remand to the hearing examiner with instructions to strike the disputed condition from

the permit.

### FACTS

Compost is created through an organic decomposition process that can occur aerobically or anaerobically. Anaerobic decomposition tends to give off more noxious odors. Factors that can affect whether composting occurs aerobically or anaerobically include nutrient balance, moisture level, oxygen level, and porosity.

Pacific Topsoils, Inc., operates a composting facility at its Maltby site in Snohomish County. The site receives approximately 50,000 tons of yard and garden waste annually. This incoming “feedstock” is initially dumped onto a large asphalt composting pad and mixed with “hog fuel.”<sup>1</sup> This mixture is then placed in a row about 20 feet wide and 20 feet high on one end of the asphalt pad. A second row of similar dimensions is then placed against the first row. Two additional feedstock layers, each approximately 10 feet high, are deposited on top of the first two rows. Additional rows and layers are added until a large pile of organic material covers the asphalt pad. A typical pile measures around 150 by 375 feet and 40 feet high. After the first pile is completed, a second pile is begun using the same technique. Around this time, the beginning of the first pile is ready for harvesting. Once material is placed in the pile, it is not moved for six to nine months. Pacific’s “large static pile” composting method has

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<sup>1</sup> There are four types of feedstock: yard and garden wastes (Type 1), manure and animal bedding (Type 2), meat and postconsumer food wastes (Type 3), and municipal and industrial solid wastes and sludges (Type 4). Pacific’s facility is limited to Type 1 feedstocks. WAC 173-350-220.

Hog fuel is a wood brush product that been processed with a grinder. It has a high carbon-to-nitrogen ratio.

remained essentially the same throughout its operation.

Pacific is required to obtain a permit from the Puget Sound Clean Air Agency (PSCAA). Pacific began composting at the Maltby site in 2004. Its PSCAA permit required immediate processing of incoming feedstock, no grinding of yard wastes, adding hog fuel to create a 30 to 1 carbon-to-nitrogen ratio, limiting pile height to 40 feet, and internal temperature measurements to ensure that compost is not harvested before the temperature drops to 68 degrees Fahrenheit above ambient. The permit also stated,

Should odor be detected emitting from a static compost pile, the area of the emissions shall be identified and the pile sealed with a bulking agent. If a section of a static pile becomes anaerobic, a layer of hog fuel at least two feet in thickness shall be placed on that section to act as a biofilter. If the pile continues to emit odors despite these efforts, the section of the pile producing the odors shall be removed and taken to a solid waste disposal facility . . . .

A PSCAA inspector noted odor on an October 7, 2004 site visit, but Pacific has had relatively few odor complaints.

Pacific is also required to obtain an annual permit from the Snohomish County Health District (SHD). SHD has incorporated the Department of Ecology solid waste handling standards in chapter 173-350 WAC. The Department of Ecology adopted these standards on February 10, 2003, after a three-year rule-making process. Existing solid waste facilities were required to meet all performance and design requirements by February 10, 2006. WAC 173-350-030(2)(a). The regulations define composting to mean “the biological degradation and transformation of organic solid

waste under controlled conditions designed to promote aerobic decomposition” and to exclude the “[n]atural decay of organic solid waste under uncontrolled conditions.”

WAC 173-350-100. And they impose the following design requirement on composting facilities:

Composting facilities shall be designed with process parameters and management procedures that promote an aerobic composting process. This requirement is not intended to mandate forced aeration or any other specific composting technology. This requirement is meant to ensure that compost facility designers take into account porosity, nutrient balance, pile oxygen, pile moisture, pile temperature, and retention time of composting when designing a facility.

WAC 173-350-220(3)(d).

When Pacific sought its July 2006 to June 2007 permit, SHD advised that its large static pile composting method did not comply with the new regulations. SHD’s position was based on a Department of Ecology letter opining that “using large static piles as a composting process does not promote aerobic decomposition” and that “[p]iling materials in a large static pile and allowing them to compost without any manipulation is essentially ‘natural decay of organic solid waste under uncontrolled conditions.’” Based on this advice, SHD issued Pacific an operating permit but imposed a condition stating that its process did not comply with the new regulations and giving it three years to come into compliance.<sup>2</sup> Pacific appealed this provision to

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<sup>2</sup> The condition stated,  
“A. RCW 70.95.030(4) states that:  
‘Composted material’ means organic solid waste that has been subjected to controlled aerobic degradation at a solid waste facility in compliance with the requirements of this chapter. Natural decay of organic solid waste under uncontrolled conditions does not result in composted material.  
“B. WAC 173-350 echoes the state RCW.

SHD's environmental health hearing examiner.

At the hearing, Pacific presented testimony from two composting experts.

Dr. Sally Brown testified that compost piles can quickly become anaerobic despite efforts to manually aerate them by manipulating or "turning" them. On the other hand, "by controlling your feedstocks and monitoring the moisture content and the [carbon to nitrogen] ratio, you can maintain a highly aerobic system even within a static pile system." Dr. Brown explained,

[I]n all compost systems you will have anaerobic sites. The extent and impact of the anaerobic sites—the easiest way to control these and reduce the importance of these anaerobic sites or the occurrence of the anaerobic sites is by mixing high carbon materials, bulky materials, with a low moisture content into the feedstock. This is also in a basic textbook on composting by H-A-U-G, is the author's name, that specifies use of high carbonaceous larger materials as a way to maintain aerobic conditions whatever type of composting system you use.

Dr. Charles Henry testified that Pacific's large static pile composting method encourages aerobic decomposition in several ways. He noted that Pacific controls the nutrient balance by adding carbon rich hog fuel to nitrogen rich grassy materials. He testified that Pacific controls porosity and pile oxygen by adding large branches to create air pockets within the pile. He testified that the optimal moisture range is between 40 and 60 percent and that Pacific controls pile moisture by not turning the

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- "C. Composting processes at the Maltby location do not meet the aforementioned definitions and cannot meet the requirements without either change to the process or change to the RCW and subsequently the WAC.
  - "D. [Pacific] must either seek a legislative remedy to this compliance issue or change the process so that it complies with the current regulation within the compliance period.
  - "E. [Pacific's] compliance period will begin with the issuance of the 2006–2007 operating permit and end when the 2008–2009 operating permit expires on June 30, 2009."

pile, thereby preventing moisture loss.<sup>3</sup> He testified that Pacific ensures pile temperatures are consistently above 55 degrees Celsius and uses sufficient retention times to produce a stable product. He summarized, “So if you were to look at Pacific Topsoils, I’m not sure which one of these process variables that it doesn’t do.”

Dr. Henry also testified to other indications that aerobic decomposition occurs within Pacific’s static piles. He noted that Pacific’s end product has an “earthy” smell caused by actinomycetes—microorganisms that live only in an aerobic environment. And he stated that his testing for porosity, moisture content, and temperature (based on samples from six inches, three feet, and six feet into the pile) indicated an aerobic decomposition process. Dr. Henry also emphasized that he found temperatures increasing from just above 55 degrees Celsius at 3 feet to about 70 degrees Celsius at 20 feet, suggesting aerobic decomposition was occurring deep in the pile. But he conceded that his data was preliminary and the core of the pile was likely anaerobic. He believed any anaerobic odors produced in the interior of the pile were being oxidized as they moved through aerobic areas.

Holly Wescott, a Department of Ecology compost specialist, reviewed Dr. Henry’s assessment. She testified that although “large pieces of wood do provide pore space within the pile,” Pacific’s pile was too large to allow convection airflow. She also noted that Pacific uses machines to load material onto the upper levels of the pile,

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<sup>3</sup> Pacific’s production manager Dave Malins also testified that Pacific controls pile moisture by moistening certain materials during pile formation and spraying water on the pile during warm months.

resulting in compaction and a reduction in porosity.<sup>4</sup> However, she agreed that there is no totally aerobic composting method and that the regulation did not specify the degree to which the process was required to be aerobic.

The hearing examiner found that Pacific employs controls on its composting process primarily during initial feedstock mixing and pile formation.<sup>5</sup> He found that Pacific adds hog fuel to create at least a 30 to 1 carbon-to-nitrogen ratio. He found that it refrains from grinding up yard waste so that it can incorporate large branches into the pile, creating porosity and increasing pile oxygen. He also found that Pacific adjusts the pile's moisture level at various points during the composting process. And he found that Pacific harvests the composted material after sufficient retention time and testing, which includes tests for product temperature and stability. Finally, he found that "a totally aerobic composting process is likely not achievable" but that controlling these variables tends to maintain aerobic decomposition.

Nevertheless, after analyzing SHD's regulatory requirements, the hearing examiner concluded that Pacific failed to prove by a preponderance of the evidence

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<sup>4</sup> Pacific did not dispute this but presented testimony that it directs machinery operators to drive over limited areas of the pile by following an established, uniform traffic pattern in order to minimize the compaction that occurs.

<sup>5</sup> Some of these findings are in the decision's "conclusions of law" section. However, findings of fact erroneously labeled "conclusions of law" are reviewed as findings of fact. Willener v. Sweeting, 107 Wn.2d 388, 394, 730 P.2d 45 (1986).

that its large static pile composting method was in compliance. Initially, the hearing examiner interpreted the regulations to require Pacific to minimize anaerobic conditions within the pile.

To meet the WAC standard, the composting process must "promote" aerobic decomposition, not merely just have aerobic process occurring naturally alongside anaerobic processes. A process which only oxidizes anaerobic odors without seeking to minimize the anaerobic conditions does not "promote" aerobic decomposition.<sup>[6]</sup>

The hearing examiner found the evidence inconclusive as to whether Pacific's process satisfied this standard.

Yes, areas within [Pacific's] large static pile are aerobic; but, areas within the pile are also anaerobic. The proportion of one to the other, both areally and temporally, is unknown. Whether leaving the pile undisturbed for six to nine months promotes aerobic decomposition in a controlled fashion simply cannot be discerned from the sparse technical evidence in the record. It may be that the controls [Pacific] employs during the initial mixing and pile formation is sufficient to promote aerobic decomposition in a controlled environment; or it may not. It may be that wetting down dry feedstock materials during initial pile construction is sufficient to promote aerobic decomposition in a controlled environment; or it may not. A properly vetted study over a sufficient time period is necessary before any defensible conclusion can be reached on this issue.

Additionally, the hearing examiner did not find Dr. Henry's spot tests to be persuasive because they were not "necessarily representative of average conditions throughout the pile or over the life of the composting process." Because the evidence was inconclusive, the hearing examiner concluded that Pacific failed to carry its burden of proof as the party appealing the permit decision.

Pacific filed a petition for writ of review with the Snohomish County Superior

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<sup>6</sup> The hearing examiner also explained that SHD was not requiring Pacific's process to be totally aerobic, but only that it "be controlled to promote aerobic and minimize anaerobic conditions." (Emphasis added.)



Court. The court entered an order reversing the hearing examiner's decision. SHD appeals.

### STANDARD OF REVIEW

"When a party appeals a superior court decision rendered pursuant to a writ of review, this court reviews de novo the record of the Hearing Examiner, not the superior court." Anderson v. Pierce County, 86 Wn. App. 290, 307, 936 P.2d 432 (1997). Any findings of fact or conclusions of law made by the superior court are treated as surplusage. Grader v. City of Lynnwood, 45 Wn. App. 876, 879, 728 P.2d 1057 (1986).

Issues of law are reviewed de novo. RCW 7.16.120(3); Hilltop Terrace Homeowner's Ass'n v. Island County, 126 Wn.2d 22, 891 P.2d 29 (1995). Interpretation of statutes and regulations is an issue of law. D.W. Close Co. v. Dep't of Labor & Indus. 143 Wn. App. 118, 126, 177 P.3d 143 (2008). While this court gives substantial weight to an agency's interpretation of regulations within its area of expertise, the court may substitute its interpretation for that of the agency. Cobra Roofing Serv., Inc. v. Dep't of Labor & Indus., 122 Wn. App. 402, 97 P.3d 17 (2004). Ultimate responsibility for interpreting a regulation resides with the reviewing court, using the de novo standard. Children's Hosp. & Med. Cen. v. Dep't of Health, 95 Wash. App. 858, 864, 975 P.2d 567 (1999).

Issues of fact are reviewed for substantial evidence. RCW 7.16.120(4)–(5). "This review is deferential and requires the court to view the evidence and reasonable inferences therefrom in the light most favorable to the party who prevailed in the highest forum that exercised fact-finding

authority.” Sunderland Family Treatment Servs. v. City of Pasco, 127 Wn.2d 782, 788, 903 P.2d 986 (1995). Consequently, this court does not review the hearing examiner’s weighing of evidence or credibility determinations. State ex rel. Lige & Wm.B. Dickson Co. v. County of Pierce, 65 Wn. App. 614, 618, 829 P.2d 217 (1992).

When reviewing a mixed question of fact and law, this court makes a de novo interpretation of the law and applies it to the facts of the case, deferring to the trier of fact’s factual determinations if they are supported by substantial evidence. Wright v. Mead Sch. Dist. No. 354, 87 Wn. App. 624, 628, 944 P.2d 1 (1997).

### ANALYSIS

Pacific contends the hearing examiner erred in concluding that its large static pile composting process does not comply with SHD’s regulations because, it argues, the process is designed to promote aerobic decomposition. This presents a mixed question of law and fact. The interpretation of what the regulations require is a question of law. Whether the circumstances of Pacific’s operation satisfy this standard is a question of fact.

We interpret agency regulations in the same way as statutes. Mader v. Health Care Auth., 149 Wn.2d 458, 472, 70 P.3d 931 (2003). When interpreting a statute, we first look to its plain language. State v. Armendariz, 160 Wn.2d 106, 110, 156 P.3d 201 (2007). If the language is unambiguous, we give effect to its plain meaning. Cerrillo v. Esparza, 158 Wn.2d 194, 201, 142 P.3d 155 (2006). To determine the plain meaning of an undefined word, we may look to its dictionary definition. Garrison v. Washington State Nursing Bd., 87 Wn.2d 195, 196,

550 P.2d 7 (1976).

The principal regulation at issue here, WAC 173-350-220(3)(d), provides, “Composting facilities shall be designed with process parameters and management procedures that promote an aerobic composting process.” It further explains, “This requirement is not intended to mandate forced aeration or any other specific composting technology” but rather “to ensure that compost facility designers take into account porosity, nutrient balance, pile oxygen, pile moisture, pile temperature, and retention time of composting when designing a facility.” A second regulation defines composting as “the biological degradation and transformation of organic solid waste under controlled conditions designed to promote aerobic decomposition.” WAC 173-350-100. Taking these regulations together, based on their plain language, they require entities like Pacific to design their facilities to “promote” aerobic decomposition by controlling factors like porosity, nutrient balance, and moisture.

Pacific argues that to “promote” aerobic decomposition, it need only encourage the aerobic process, not minimize anaerobic decomposition. We agree. Webster’s Dictionary defines “promote” as “to contribute to the growth, enlargement, or prosperity of : FURTHER, ENCOURAGE . . . to bring or help to bring (as a business enterprise) into being : LAUNCH . . . to increase the activity of (a catalyst) by adding a small percentage of another substance . . . to accelerate.” Webster’s Third New International Dictionary 1815 (1993). Nothing about this definition suggests that to promote something one must maximize it (or minimize its opposite). Instead, the plain and ordinary meaning of the word “promote” is synonymous with the word “encourage.” Thus, if Pacific designed its facility to

encourage aerobic decomposition by controlling the specified parameters, it would comply with the regulation.

But the hearing examiner interpreted the regulation to require more than this. While acknowledging the controls Pacific employs, the hearing examiner was not persuaded that these actions were sufficient to “promote” aerobic decomposition under the regulation. He found that an unknown portion of the pile’s core area is anaerobic, at least at some times, and that Pacific’s plan for addressing odor-producing anaerobic sections is to shield them with an oxidizing outer layer rather than make the sections aerobic. The hearing examiner concluded the regulation did not allow this, explaining, “A process which only oxidizes anaerobic odors without seeking to minimize the anaerobic conditions does not ‘promote’ aerobic decomposition.” In essence, the hearing examiner interpreted “promote” aerobic decomposition to mean “minimize” anaerobic conditions.

This was erroneous because the two concepts are not equivalent. It is possible to promote aerobic decomposition without minimizing anaerobic conditions. The regulation merely requires that aerobic decomposition be “promoted,” i.e., encouraged, not that it be maximized or that anaerobic conditions be minimized. And it is not inconsistent with the regulation that a portion of the pile may be decomposing anaerobically. The record is undisputed that there is no totally aerobic composting process and that the regulations do not specify permissible thresholds or ranges of aerobic versus anaerobic decomposition.<sup>7</sup> Nor do they require that facilities take action

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<sup>7</sup> Both parties and amicus curiae argue extensively about the degree of control

to promote aerobic decomposition “throughout the process” as opposed to concentrating their control procedures at the pile formation stage.<sup>8</sup>

Because the hearing examiner’s interpretation of the regulation is erroneous, his application of the law to the facts also fails. The hearing examiner found that Pacific encourages aerobic decomposition by adding hog fuel to increase the carbon-to-nitrogen ratio of its feedstock to specific, accepted levels. He found that Pacific arranges the pile constituents to create air pockets within the pile, increasing pile oxygen and porosity.<sup>9</sup> He found that Pacific moistens dry feedstock and makes

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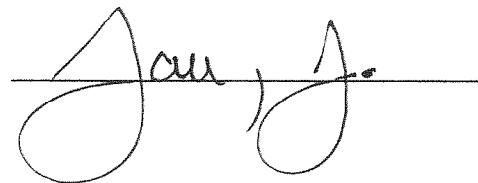
Pacific exercises and the extent to which decomposition occurs aerobically versus anaerobically with large static pile composting as compared to the methods Pacific’s competitors use. Pacific’s evidence suggests its process is mostly aerobic and no more anaerobic than other methods. SHD’s evidence suggests the process is mostly anaerobic and that methods involving greater manipulation or turning of the pile are more aerobic. The hearing examiner did not resolve this issue, explicitly finding that the relative amounts were unknown. But here, the regulations give no indication of the degree to which decomposition must occur aerobically as opposed to anaerobically; they only require Pacific to control specific variables to encourage aerobic decomposition.

<sup>8</sup> At oral argument, counsel for SHD insisted that the regulation requires Pacific to take steps to promote aerobic decomposition “throughout the process,” but he could point to no regulatory provision to support this assertion. Similarly, in its amicus brief, the Department of Ecology asserts that the regulations require Pacific to maintain aerobic decomposition “uniformly throughout the pile,” but it fails to cite any regulatory provision to support this assertion. We also note that the Department of Ecology claims that “aeration of some sort” is required under the regulation, but the only language in the regulation referring to aeration is the statement, “This requirement is not intended to mandate forced aeration.” Brief of Amicus at 4 n.2; WAC 173-350-220(3)(d).

<sup>9</sup> While Wescott testified to factors that could undermine porosity in the pile, she did not question whether Pacific actually engaged in steps to increase porosity or that such steps encourage aerobic decomposition.

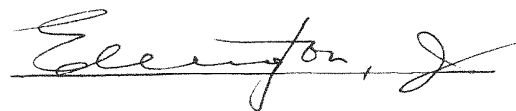
moisture adjustments during the composting process. And he found that Pacific harvests composted material after sufficient retention time and temperature testing. These facts show that Pacific does not indiscriminately deposit organic matter onto a pile in an uncontrolled fashion and wait for it to decompose naturally. Rather, Pacific controls the process by taking specific steps to encourage aerobic decomposition, taking into account all the parameters specified in the regulation. Applying the regulation to these facts, we conclude that Pacific complies with the regulatory standard. Its facility is designed to promote an aerobic composting process by controlling the specified factors in a way that encourages aerobic

decomposition. Because Pacific is in compliance, we remand to the hearing examiner with instructions to strike the disputed condition from the permit.<sup>1</sup>

A handwritten signature in black ink, appearing to read "Jay J.", written over a horizontal line.

WE CONCUR:

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<sup>1</sup> As this issue is dispositive, we do not reach the other issues the parties raise.

Dwyer, A.C.J.